

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, Applicant has added new claims 16-25. Thus, claims 1-25 are now pending in the application. In response to the Office Action (No. 7), Applicant respectfully submits that the pending claims define patentable subject matter.

I. Preliminary Matters

The Examiner again has not acknowledged receipt of the priority documents and the claim for foreign priority under 35 U.S.C. § 119. Applicant requests the Examiner provide acknowledgment of receipt of the priority documents and the claim for foreign priority under 35 U.S.C. § 119 in the next action.

The Examiner again did not indicate whether the drawings are accepted. Applicant requests the Examiner provide an indication regarding acceptance of the drawing in the next action.

II. Prior Art Rejections

A. Disclosure of Admitted Prior Art

Admitted Prior Art Figure 1A discloses a detachable storage device, such as a detachable or external storage device, connected via a coupling device to a host device which includes a file system. Application programs within the host device can use the storage device in the same

manner of using a storage device within the host device through the file system of the host device.

Admitted Prior Art Figure 1B discloses a host device is connected to a slave device including a storage device. The host device uses an application program to perform connection to the slave device.

B. Disclosure of Domenikos

Domenikos is directed to a system and process that allow a computer to connect to a server of an Internet site for executing an application program that is stored on a disk linked to the server. Figure 1 depicts a system 10 which includes a client element 12, such as a stand alone or networked computer, which accesses, deploys, and executes application program stored at drive of an Internet site. The Internet site includes a server element 14 linked to memory devices 14a and 14b such as external disk drive systems. Typically the server 14 is a data processing system that runs one or more server processes for maintaining an Internet site that includes one or more files for network access. Each disk drive system 14a and 14b can maintain a set of computer files, including files of executable application program code, which the server 14 can access and control.

Domenikos discloses providing a data transport interface for connecting to the server, and transmitting from the server a server address signal representative of a network address of the server and a path name signal representative of a file system that includes an application program. A mount request is generated as a function of the path name signal and transmitted to

the server to direct the server to provide an array of server file pointers that point to a file descriptor representative of the file system that includes the application program. An array of remote file pointers is generated, as a function of the server address signal and the array of server file pointers, and provided to a program loader that transports from the disk at the server site to a local program memory element, a file block associated with the selected remote file pointer.

C. Analysis

Claims 1-15 remain rejected based on the same grounds set forth in the previous Office Action. Namely, claims 1, 8, 9, 11 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Admitted Prior Art in view of Domenikos et al. (U.S. Patent No. 5,838,910; hereafter "Domenikos"). Claims 2, 3 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Admitted Prior Art in view of Domenikos and Jigour et al. (U.S. Patent No. 5,81,426; hereafter "Jigour"). Claims 4-7, 10, 14 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Admitted Prior Art in view of Domenikos, Jigour and Intel: Understanding the Flash Translation (FTL) Specification. Applicant respectfully traverses the prior art rejections.

With regards to independent claim 1, the Examiner maintains that the Admitted Prior Art discloses all of the features of the claimed slave device except for a media driver, which the Examiner asserts is disclosed by Domenikos. With regards to independent claim 8, the Examiner maintains that the Admitted Prior Art discloses all of the features of the claimed host device except for performing connection to a top layer of the slave device according to a predetermined protocol, which the Examiner asserts is disclosed by Domenikos. In particular, the Examiner

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Patent Application No. 09/597,702

maintains that Domenikos teaches the features of claims 1 and 8 which are missing from the Admitted Prior Art via “the device driver 26”, “the file hierarchy (col 14, ln 39-46)”, “disk partition (col 4, ln 4-45)”, “a file directory (col 4, ln 24-45)”, and “transport protocol layer (col 9, ln 48-60)”.

After carefully reviewing the cited references, we believe that the claimed invention would not have been rendered obvious in view of the combination of the Admitted Prior Art and Domenikos.

In the Amendment filed May 28, 2003, Applicant argued that the claimed invention would not have been rendered obvious in view of the combination of the Admitted Prior Art and Domenikos because one of ordinary skill in the art would not have been motivated to modify the slave and host devices of the Admitted Prior Art based on the teachings of Domenikos to produce the claimed invention. However, the Examiner did not respond to Applicant’s arguments in this regard.

In the Amendment filed May 28, Applicant also argued that Domenkis does not teach or suggest a slave device comprising “a media driver for performing connection to the file system of the host device via the predetermined coupling device according to a predetermined protocol”, as recited in independent claim 1. With regards to independent claim 8, Applicant argued that Domenikos does not teach or suggest the host device (i.e., the client computer 12) comprising a file system for performing connection to a top layer of the slave device according to a predetermined protocol so that at least a portion of the storage device of the slave device operates as a storage device of the host device, as claimed. With regards to independent claim 11, Applicant argued Domenikos does not teach or suggest the claimed method steps of “(b)

performing connection between the host device and the slave device according to a predetermined protocol between a top layer of the slave device and a file system of the host device so that at least part of a storage device of the slave device operates as a storage device of the host device; and (c) accessing the storage device of the slave device by the host device via the file system of the host device, the top layer of the slave device and a bottom layer of the slave system.”

In Domenikos, the device driver 26 which is part of the client computer 12 (a host device rather than a slave device) is not a file system drive layer. Further, “the file hierarchy”, “disk partition”, “a file directory”, and/or “transport protocol layer” of Domenikos which the Examiner cites in support of the rejection are not related to the claimed media driver but rather are directed to an administration program of the Internet server 40 (a slave device rather than a host device) for storing a file system of computer files on the memory devices 14a and 14b according to a select file system protocol.

In response to the arguments for patentability, the Examiner (pages 6-7 of the Office Action) asserts that “[s]ince ‘the file hierarchy’, ‘disk partition’, ‘a file directory’, or ‘transport protocol layer’, device driver 26 on client site of [the] Domenikos reference allow the client to connect to the server for executing an application program stored on the server ..., ‘the file hierarchy’, ‘disk partition’, ‘a file directory’, or ‘transport protocol layer’, device driver 26 can be used for the purpose of the media driver.” While Applicant agrees with the Examiner that Domenikos discloses allowing a remote computer (client) to connect to a server of an Internet site for executing an application program that is stored at the server, Applicant respectfully submits that

the Examiner has not provided any objective or cogent reasoning why one of ordinary skill in the art would have been motivated to modify Applicant's admitted prior art (Figure 2) based on the teachings of Domenikos to produce the claimed invention.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify to combine the reference teachings.¹ The Examiner's only statement in support of combining the reference is the assertion that "[i]t would have been obvious to apply the teaching of Domenikos to [Applicant's admitted prior art] in order to provide a system that allow[s] for deployment and execution of application programs across the Internet without downloading the application code into the storage memory the user system." However, as discussed on pages 1-2 of the present application, the slave device depicted in Figure 2 (Applicant's admitted prior art) is a peripheral device such as a portable data terminal, zip drive, MP3 player or digital camera, and the host device is a computer device such as a personal computer, wherein slave device and the host device are connected by a physical coupling device. Accordingly, the purpose and operation of the slave device of Figure 2 is very different from that of an Internet server such that the slave device of Figure 2 would not be utilized for storing and executing application code or connection to a host device via the Internet. As a result, Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to modify the slave device of Figure 2 to include the file sharing system and/or

¹ "To support the conclusion that the claimed invention is directed to obvious subject matter, either references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference." *Ex parte Clapp* 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

administration program of the server of Domenikos which provide for the deployment and execution of application programs across the Internet at the server without downloading the application code into the storage device of the host device.

In view of the above, Applicant respectfully submits that independent claims 1, 8 and 11, as well as dependent claims 2-7, 8-10 and 12-15, should be allowable because (1) the Admitted Prior Art and Domenikos do not teach or suggest all of the features of the claims, and (2) one of ordinary skill in the art would not have been motivated to modify the Admitted Prior Art based on the teachings of Domenikos to produce the claimed invention.

III. New Claims

By this Amendment, Applicant has added new dependent claims 16-25 to further define the claimed invention with regard to the subject matter of the embodiments illustrated in Figures 3-5. Applicant respectfully submits that claims 16-25 should be allowable at least by virtue of their dependency on independent claims 1, 8 and 11. Further, Applicant respectfully submits that it is quite clear prior art Figure 2, Domenikos, Jigour and the Intel reference, alone or in combination, do not teach or suggest the features of claims 16-24.

With regards to claims 16, 19 and 22, Applicant respectfully submits the combined references do not teach or suggest the file system of the host device comprises a control and error correction layer, a logical-to-physical conversion layer, and a file system drive layer, the media driver comprises a control and error correction layer, and the slave device is logically connected to the host device according to a predetermined protocol between the control and error correction

layer of the media driver of the slave device and a control and error correction layer of the file system of the host device such that data is transmitted from the control and error correction layer of the media driver of the slave device to the application program of the host device via the control and error correction layer, the logical-to-physical conversion layer and the file system drive layer of the file system of the host device.

As shown in Figure 3, a media driver 224a of the slave device 22 may include only a control and error correction layer 36 for controlling the storage device 222 and detecting and correcting errors. A protocol architecture included in a file system 204a of the host device 20 connected with the slave device 22 is composed of a control and error correction layer 30 for detecting and correcting errors, a logical-to-physical (L-P) conversion layer 32 for converting logical location information used by the file system 204 into physical location information, and a file system drive layer 34 for abstracting data stored in the storage device 222 to allow the application program 202 to access the data as a file using the logical location information. The slave device 22 is logically connected to the host device 20 according to a predetermined protocol between the control and error correction layer 36 of the slave device 22 and the control and error correction layer 30 of the host device 20.

With regards to claims 17, 20 and 23, Applicant respectfully submits the combined references do not teach or suggest the file system of the host device comprises a control and error correction layer and a file system drive layer, the media driver comprises a control and error correction layer and a logical-to-physical conversion layer, and the slave device is logically connected to the host device according to a predetermined protocol between the logical-to-

physical conversion layer of the media driver of the slave device and a logical-to-physical conversion layer of the file system of the host device such that data is transmitted from the control and error correction layer and the logical-to-physical conversion layer of the media driver of the slave device to the application program via the logical-to-physical conversion layer and file system drive layer of the file system of the host device.

As shown in Figure 4, a media driver 224b of the slave device 22 may include a L-P conversion layer 46 for converting logical location information used by the file system 204 into physical location information and a control and error correction layer 48 for controlling the storage device 222 and detecting and correcting errors. A protocol architecture included in a file system 204b of the host device 20 includes a L-P conversion layer 42 and a file system drive layer 44, wherein the slave device 22 is logically connected to the host device 20 according to a predetermined protocol between the L-P conversion layer 46 of the slave device 22 and the L-P conversion layer 42 of the host device 20.

With regards to claims 18, 21 and 24, Applicant respectfully submits the combined references do not teach or suggest the file system of the host device comprises a file system drive layer, the media driver comprises a control and error correction layer, a logical-to-physical conversion layer, and a file system drive layer, and the slave device is logically connected to the host device according to a predetermined protocol between the file system drive layer of the media driver of the slave device and the file system drive layer of the file system of the host device such that data transmitted via the control and error correction layer, the logical-to-physical conversion layer and the file system drive layer of the media driver of the slave device

is sent to the application program via the file system drive layer of the file system of the host device.

As shown in Figure 5, a media driver 224c of the slave device 22 may include a file system drive layer 56 for abstracting data stored in the storage device 222 to allow the application program 202 to access the data as a file using the logical location information, a L-P conversion layer 57 for converting logical location information used by the file system 204 into physical location information, and a control and error correction layer 58 for controlling the storage device 222 and detecting and correcting errors. A protocol architecture included in a file system 204c of the host device 20 includes only a file system drive layer 54, wherein the slave device 22 is logically connected to the host device 20 according to a predetermined protocol between the file system drive layer 56 of the slave device 22 and the file system drive layer 54 of the host device 20.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Patent Application No. 09/597,702

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

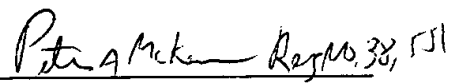
Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER


for Christopher R. Lipp
Registration No. 41,157

Date: November 14, 2003

Attorney Docket No.: Q59587